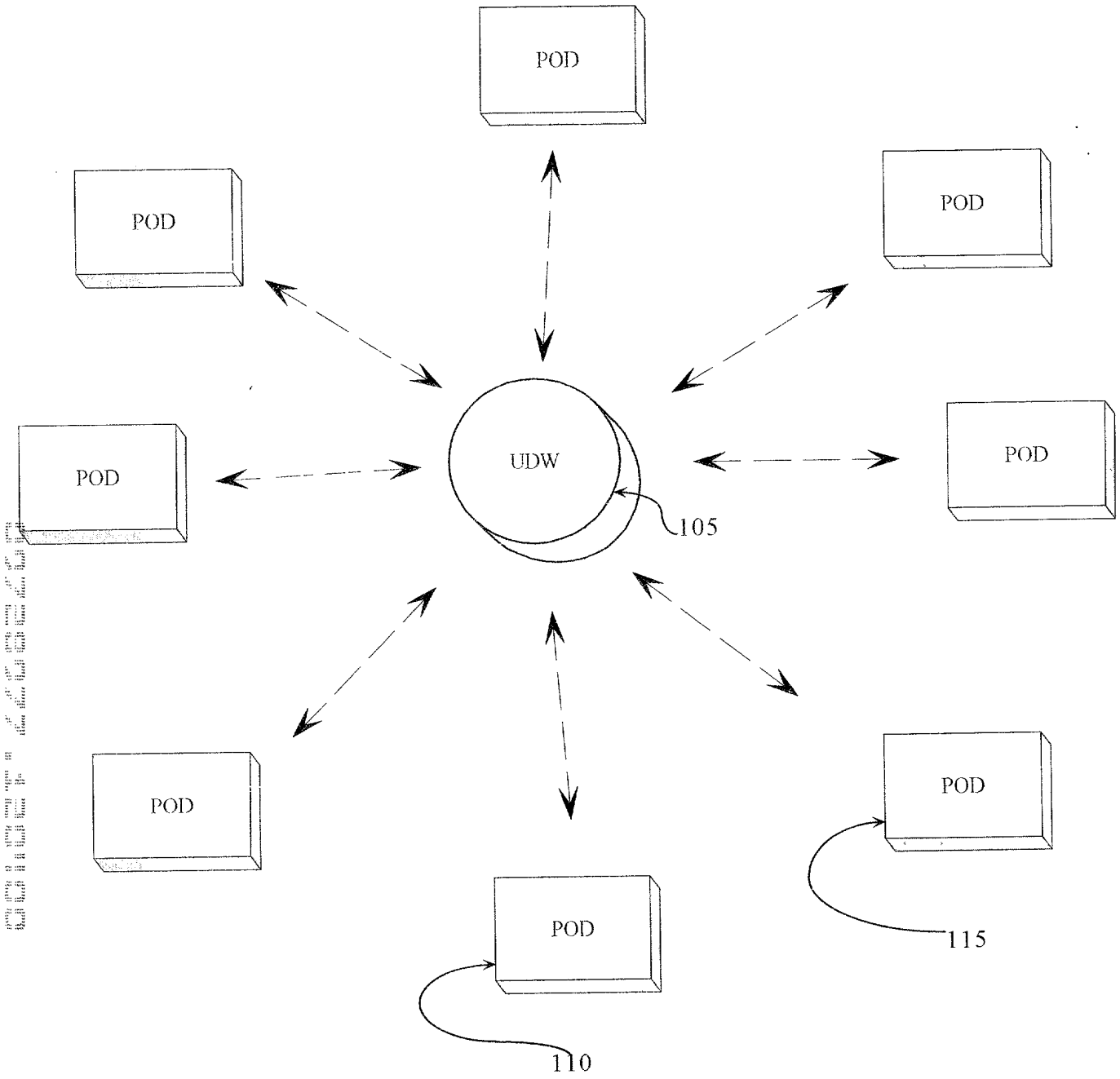

Figure 1

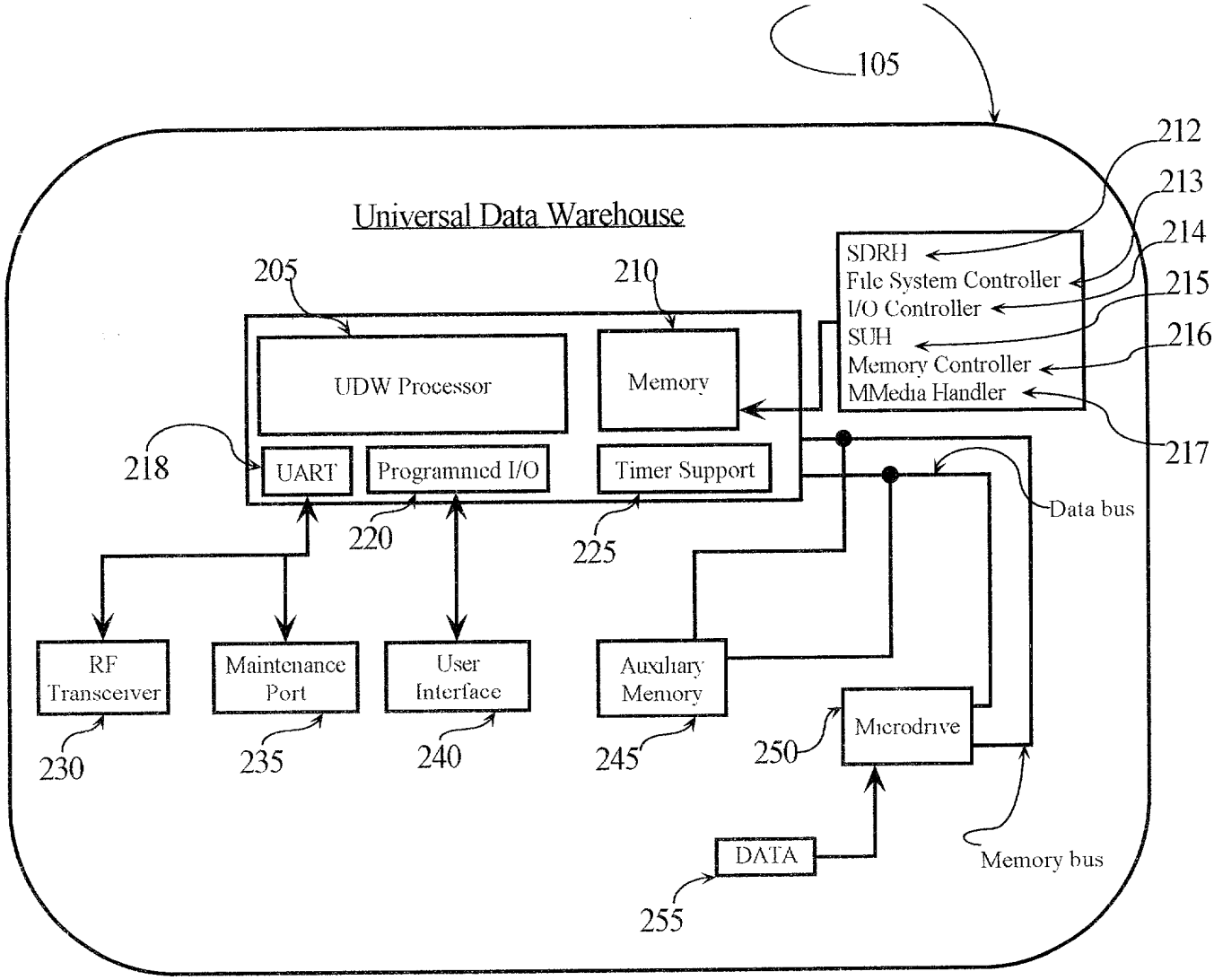
105
Universal Data Warehouse
212
213
214
215
216
217
SDRH
File System Controller
I/O Controller
SUH
Memory Controller
MMedia Handler
205
210
UDW Processor
Memory
218
UART
Programmed I/O
Timer Support
220
225
Data bus
RF Transceiver
Maintenance Port
User Interface
Auxiliary Memory
Microdrive
230
235
240
245
250
DATA
255
Memory bus

Figure 2A

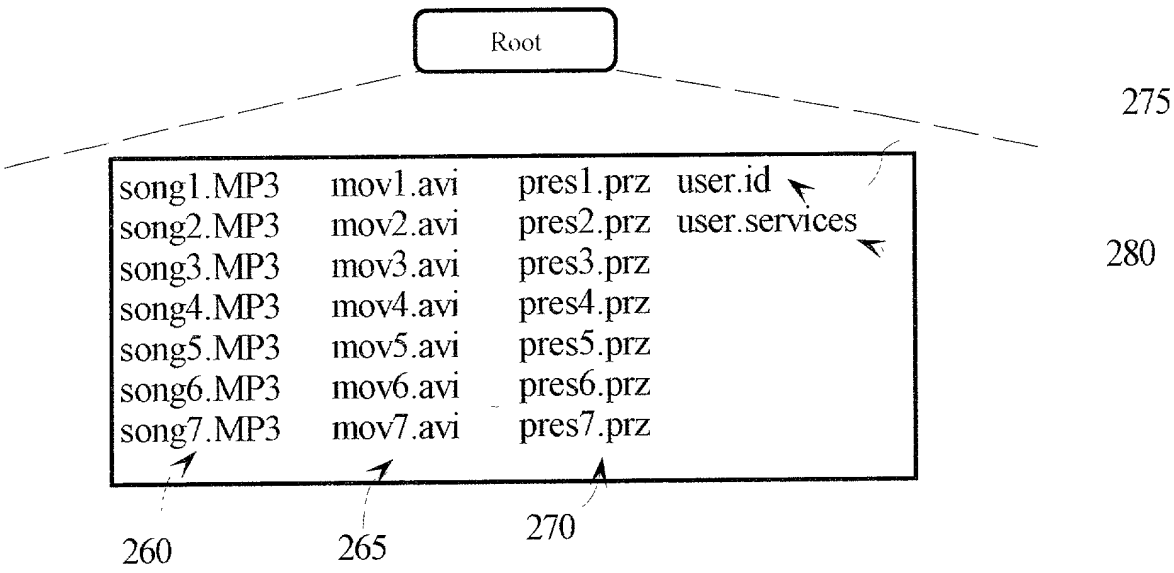
255
Root
275
song1.MP3
song2.MP3
song3.MP3
song4.MP3
song5.MP3
song6.MP3
song7.MP3
mov1.avi
mov2.avi
mov3.avi
mov4.avi
mov5.avi
mov6.avi
mov7.avi
pres1.prz
pres2.prz
pres3.prz
pres4.prz
pres5.prz
pres6.prz
pres7.prz
user.id
user.services
280
260
265
270

Figure 2B

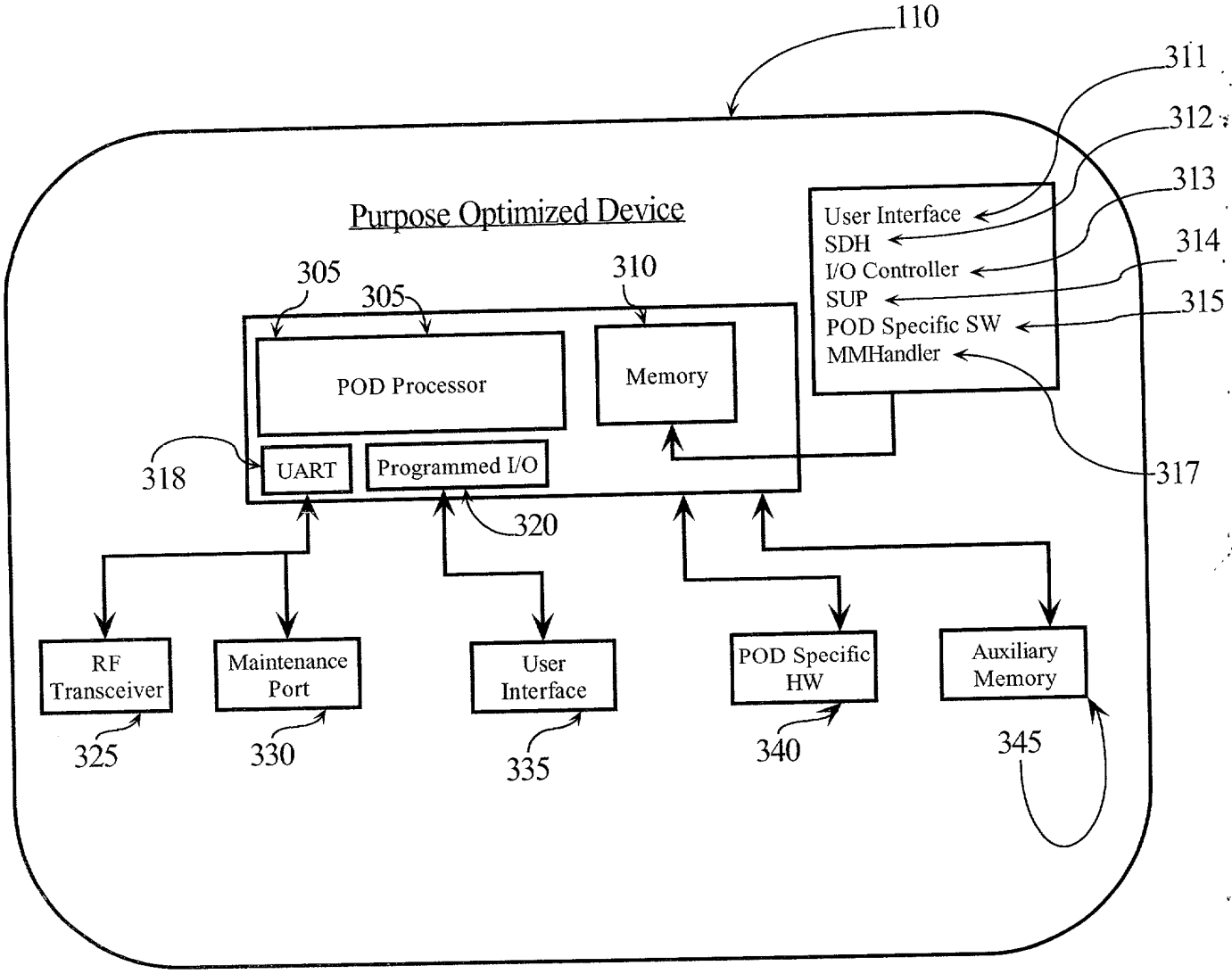
110
311
312
313
314
315
317
Purpose Optimized Device
User Interface
SDH
I/O Controller
SUP
POD Specific SW
MMHandler
305
305
310
POD Processor
Memory
318
UART
Programmed I/O
320
RF Transceiver
Maintenance Port
User Interface
POD Specific HW
Auxiliary Memory
325
330
335
340
345

Figure 3

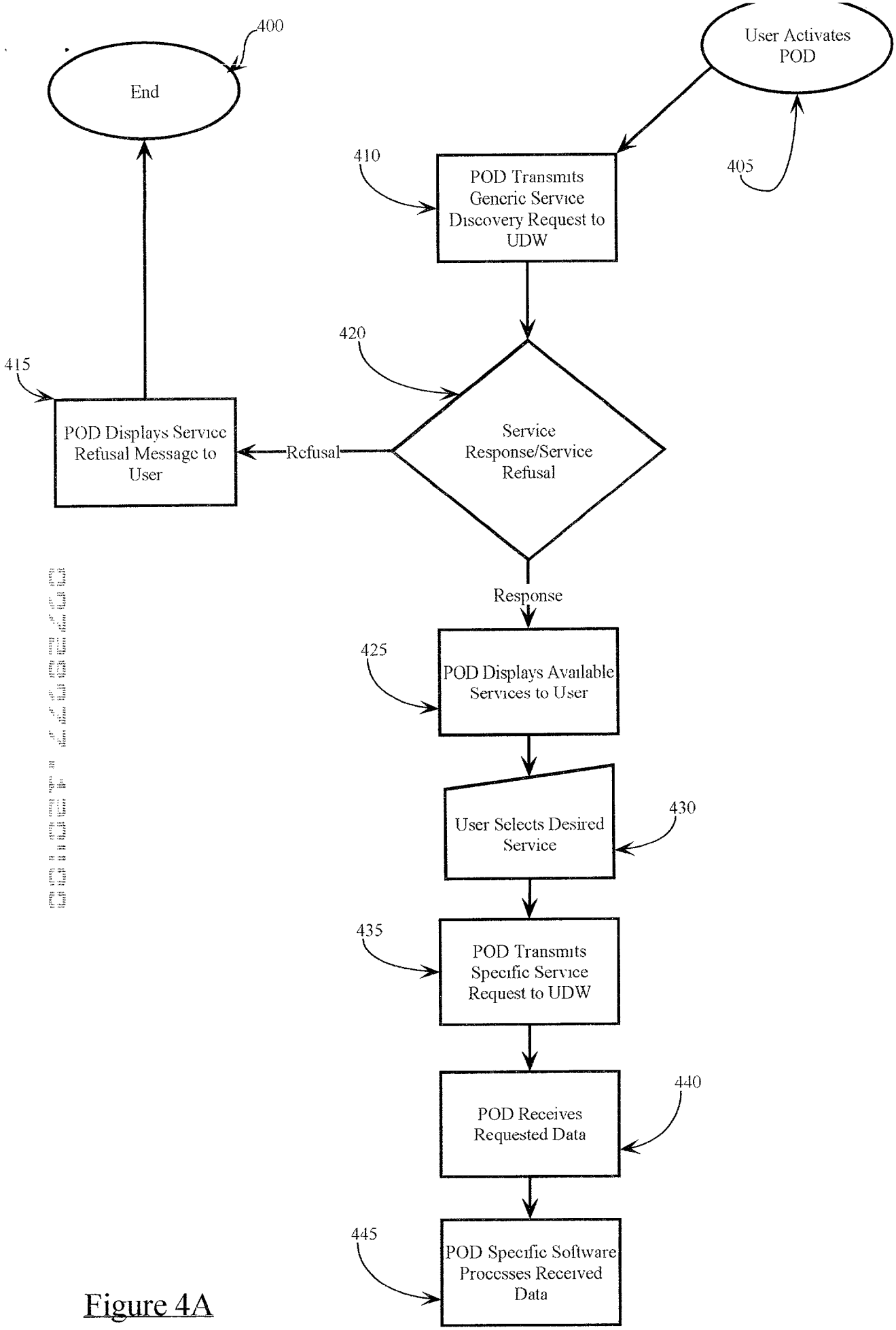
400
End
User Activates POD
405
410
POD Transmits Generic Service Discovery Request to UDW
420
415
POD Displays Service Refusal Message to User
Refusal
Service Response/Service Refusal
Response
425
POD Displays Available Services to User
User Selects Desired Service
430
435
POD Transmits Specific Service Request to UDW
440
POD Receives Requested Data
445
POD Specific Software Processes Received Data

Figure 4A

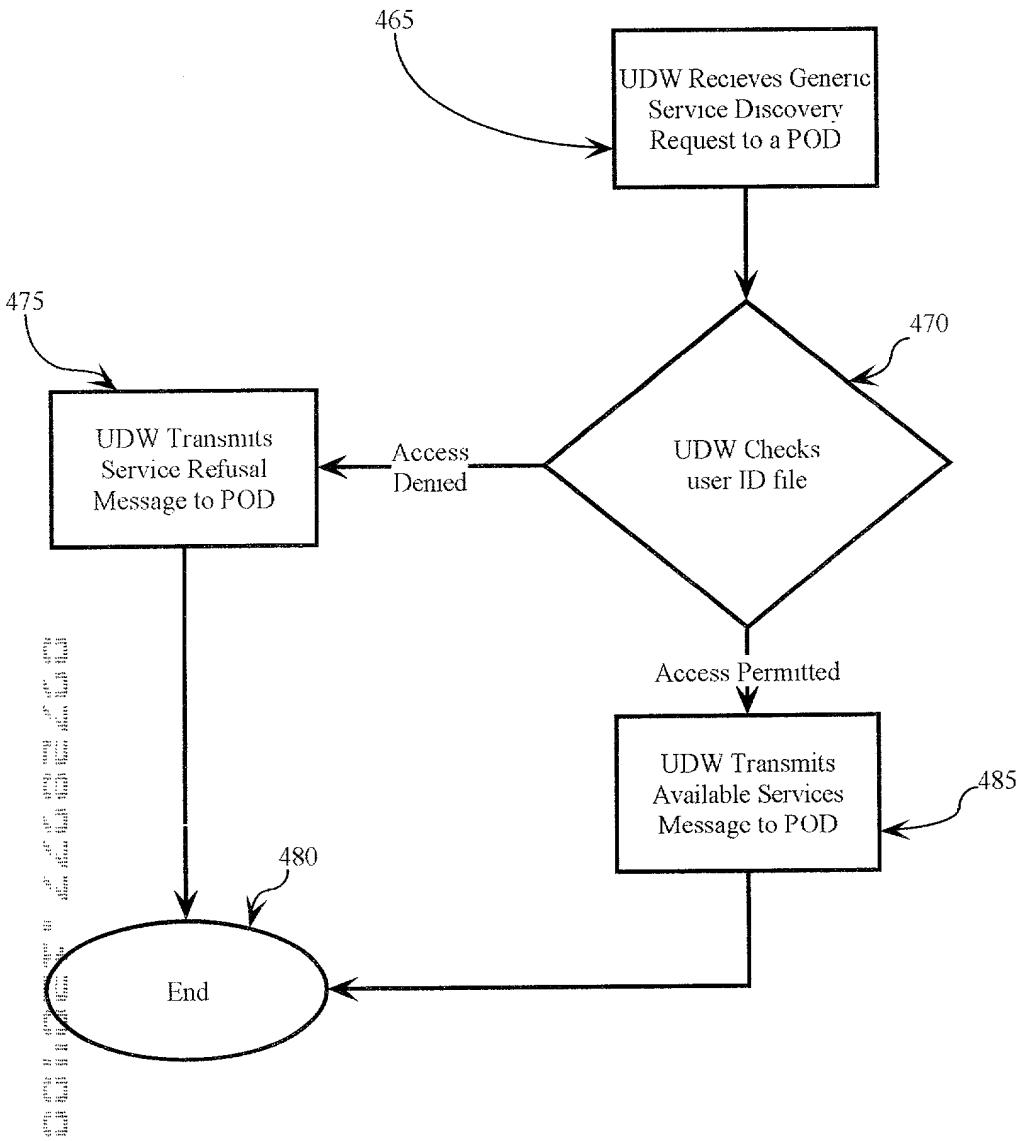
465
UDW Recieves Generic Service Discovery Request to a POD
475
470
UDW Transmits Service Refusal Message to POD
Access Denied
UDW Checks user ID file
Access Permitted
UDW Transmits Available Services Message to POD
485
480
End

Figure 4B

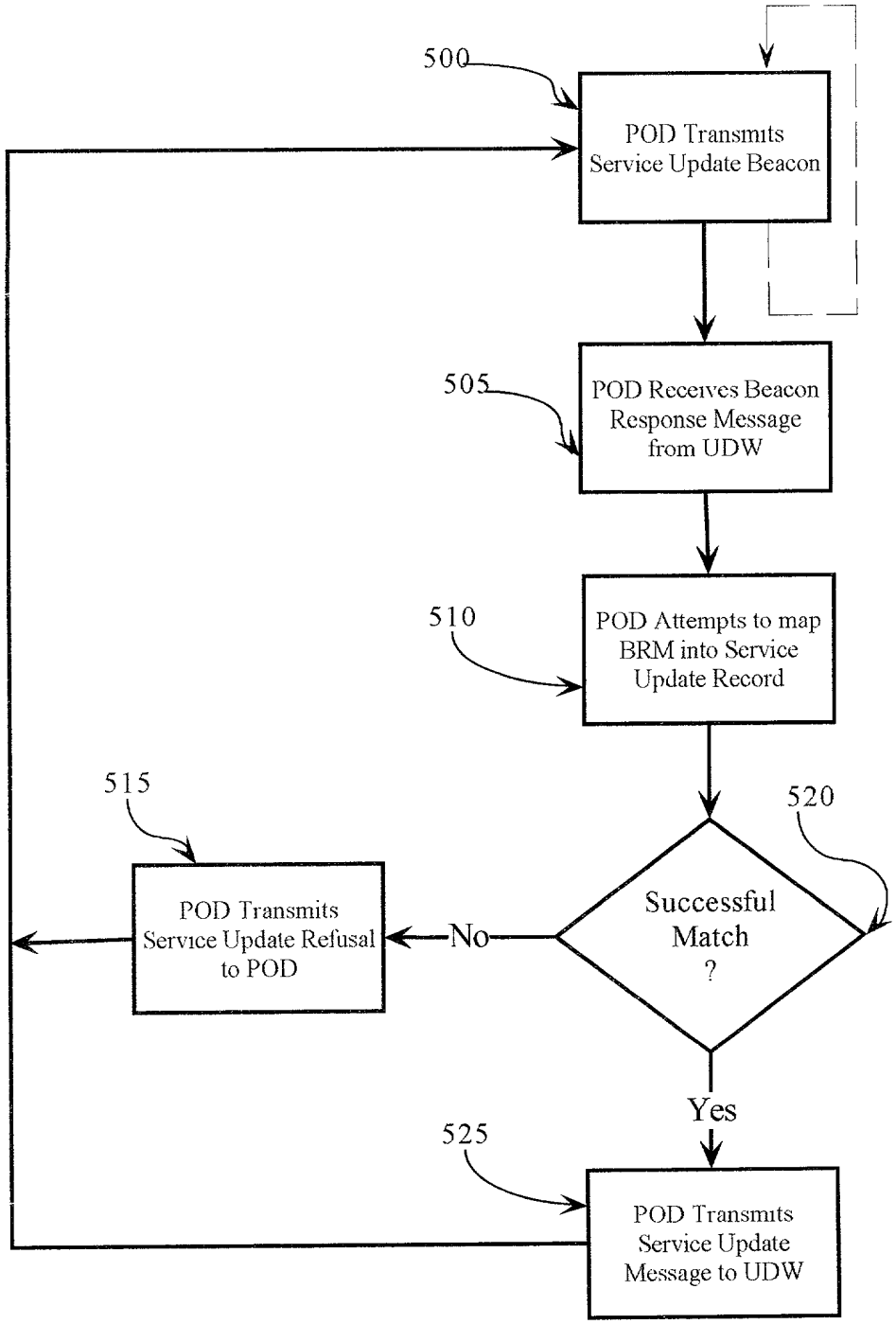
500
POD Transmits Service Update Beacon
505
POD Receives Beacon Response Message from UDW
510
POD Attempts to map BRM into Service Update Record
515
520
POD Transmits Service Update Refusal to POD
No
Successful Match ?
Yes
525
POD Transmits Service Update Message to UDW

Figure 5A

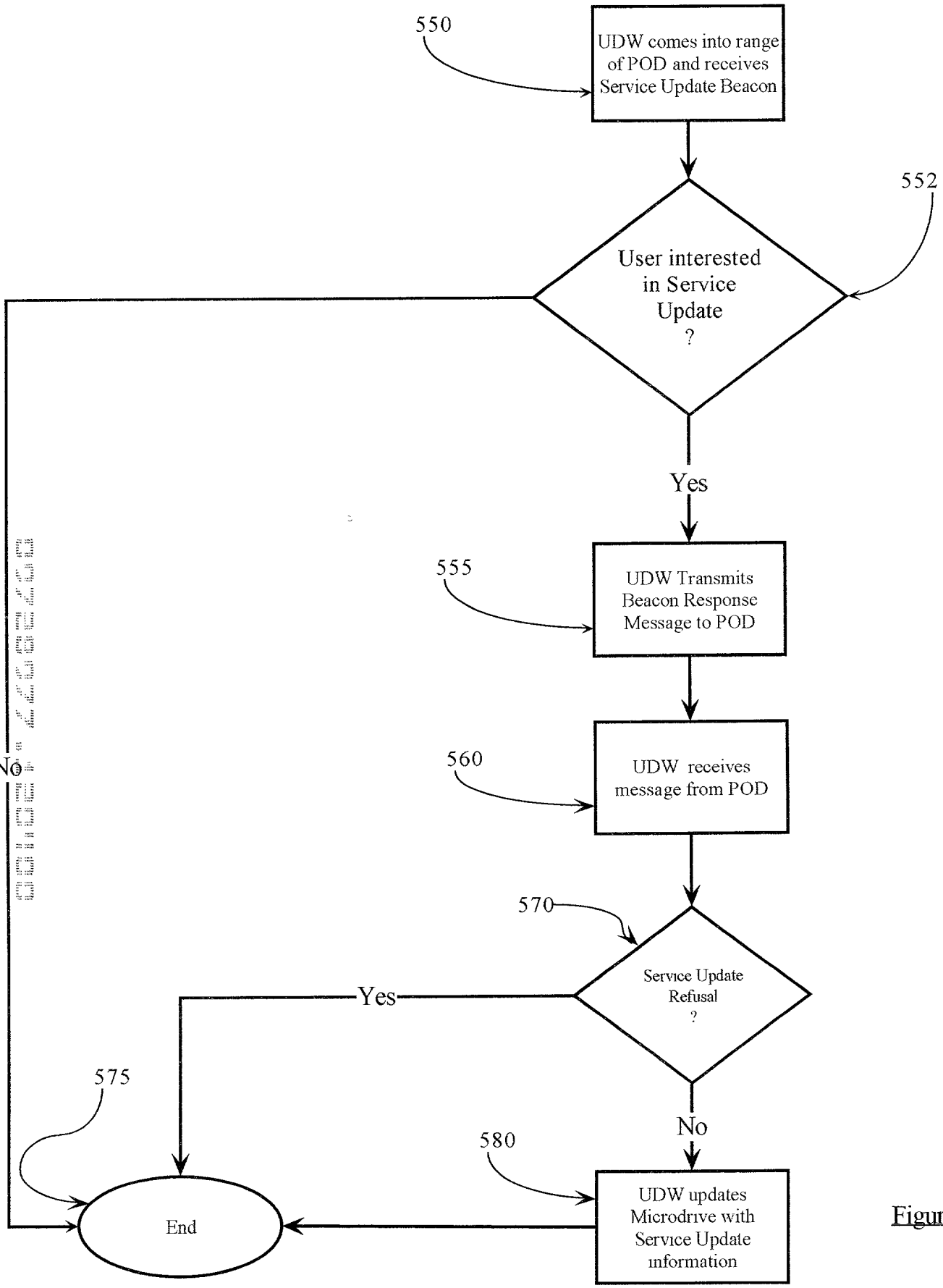
550
UDW comes into range of POD and receives Service Update Beacon
552
User interested in Service Update ?
Yes
No
555
UDW Transmits Beacon Response Message to POD
560
UDW receives message from POD
570
Service Update Refusal ?
Yes
No
575
580
UDW updates Microdrive with Service Update information
End

Figure 5B

Message Types

Message Type	Value
Generic Service Discovery Request	0000
Service Response	0001
Service Refusal	0002
Specific Service Request	0003
Service Update Beacon	0004
Beacon Response	0005
Service Update Refusal	0006
Service Update	0007

600

Message Format

Message Value
message length
variable field 1
variable field 2
.
variable field n

620

Service Update Record

Service Update Type	value	user ID/password pair
Weather	0000	jon@xyz.com/dog
Stock Quote	0001	sally@xyz.com/lynx
Account Balance	0002	kim@xyz.com/lion
e-mail	0003	ed@xyz.com/bear
phone calls	0004	nicholas@xyz com/cat

630

Figure 6